

CLAIMS:

1. An inkjet print head (1) comprising at least one nozzle chamber (2), having a nozzle aperture (3) defined in one wall thereof for the ejection of printing fluid out of said aperture (3), and a printing fluid supply channel interconnected with said nozzle chamber (2), characterized in that it further comprises a printing fluid droplet tail release guide arrangement (4) having a predetermined position at an edge of a circumference of said aperture (3).
5
2. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a pointed burr like element the point of which is directed inwards of said aperture.
10
3. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a bar of essentially triangular cross-section a base of which rests on an inner surface of said nozzle chamber (2) and a pointed edge of which protrudes towards the center of said aperture (3) said bar further extending along said inner surface inwards of said nozzle chamber (2).
15
4. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a pointed structure of essentially pyramidal shape a base of which rests on an inner surface wall of said nozzle chamber (2) and a pointed tip of which protrudes towards the center of said aperture (3).
20
5. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a pointed burr like element the point of which is directed outwards of said aperture (3).
25
6. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises an essentially saw tooth shaped section arranged at a portion of said edge of said circumference of said aperture (3).

7. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a recessed section of essentially triangular shape in an inner surface wall of said nozzle chamber (2) a base of which rests in the plane of said aperture (3) and a point of which is directed inwards of said nozzle chamber (2).

8. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a recessed section of essentially triangular pyramidal shape in an inner surface wall of said nozzle chamber (2) a base of which rests in the plane of said aperture (3) and a point of which is directed inwards of said nozzle chamber (2).

9. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a recessed section of essentially hemispherical shape in an inner surface wall of said nozzle chamber (2) a chord of which rests in the plane of said aperture (3) and an arc of which extend inwards of said nozzle chamber (2).

10. The inkjet print head (1) of claim 1, characterized in that said printing fluid droplet tail release guide arrangement (4) comprises a recessed section of essentially rectangular shape extending from said aperture (3) inwards along an inner surface wall of said nozzle chamber (2).

11. A print cartridge for an inkjet printing device comprises a print cartridge body, a fluid reservoir and is characterized in that it further comprises an inkjet print head (1) according to any one of the preceding claims.

12. An inkjet printing device, characterized in that it comprises an inkjet print head (1) according to any one of claims 1 to 10.

13. A method for increasing droplet placement accuracy in an inkjet print head (1) having at least one nozzle chamber (2) with a nozzle aperture (3) defined in one wall thereof for the ejection of printing fluid out of said aperture (3), characterized in that it comprises the

step of providing a printing fluid droplet tail release guide arrangement (4) at a predetermined position at an edge of a circumference of said aperture (3).

14. The method of claim 13, characterized in that it further comprises the step of
5 providing as said printing fluid droplet tail release guide arrangement (4) a pointed burr like element such that the point thereof is directed inwards of said nozzle aperture (3).

15. The method of claim 13, characterized in that it further comprises the step of
providing as said printing fluid droplet tail release guide arrangement (4) a bar of essentially
10 triangular cross-section such that a base thereof will rest on an inner surface of said nozzle chamber (2) and such that a pointed edge thereof protrudes towards the center of said aperture (3) and directing said bar such that it extends along said inner surface inwards of said nozzle chamber (2).

15 16. The method of claim 13, characterized in that it further comprises the step of
providing as said printing fluid droplet tail release guide arrangement (4) a pointed structure of essentially pyramidal shape such that a base thereof rests on an inner surface wall of said nozzle chamber (2) and such that a pointed tip thereof protrudes towards the center of said aperture (3).

20

17. The method of claim 13, characterized in that it further comprises the step of
providing as said printing fluid droplet tail release guide arrangement (4) a pointed burr like element such that a point thereof is will be directed outwards of said aperture (3).

25 18. The method of claim 13, characterized in that it further comprises the step of
providing as said printing fluid droplet tail release guide arrangement (4) an essentially saw tooth shaped section at a portion of said edge of said circumference of said aperture (3).

30 19. The method of claim 13, characterized in that it further comprises the step of
providing as said printing fluid droplet tail release guide arrangement (4) a recessed section of essentially triangular shape in an inner surface wall of said nozzle chamber (2) such that a base thereof rests in the plane of said aperture (3) and a point thereof is directed inwards of said nozzle chamber (2).

20. The method of claim 13, characterized in that it further comprises the step of providing as said printing fluid droplet tail release guide arrangement (4) a recessed section of essentially triangular pyramidal shape in an inner surface wall of said nozzle chamber (2) such that a base thereof rests in the plane of said aperture (3) and a point thereof is directed 5 inwards of said nozzle chamber (2).

21. The method of claim 13, characterized in that it further comprises the step of providing as said printing fluid droplet tail release guide arrangement (4) a recessed section of essentially hemispherical shape in an inner surface wall of said nozzle chamber (2) such 10 that a chord thereof rests in the plane of said aperture (3) and an arc thereof extend inwards of said nozzle chamber (2).

22. The method of claim 13, characterized in that it further comprises the step of providing as said printing fluid droplet tail release guide arrangement (4) a recessed section 15 of essentially rectangular shape such that it extends from said aperture (3) inwards along an inner surface wall of said nozzle chamber (2).